DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program 333 Burma Rd.
Oakland, CA 94607
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August 11, 2009

Contract No. 04-0120F4 04-SF-80-13.2 / 13.9 Self-Anchored Suspension Bridge Letter No. 05.03.01-004925

Michael Flowers Project Executive American Bridge/Fluor, A JV 375 Burma Road Oakland, CA 94607

Dear Michael Flowers,

## Request for Change Order - RFCO 063

The Department has reviewed ABF-CAL-LTR-001000, dated August 3, 2009, in which ABF requested a CCO be issued in response to State Letter 05.03.01-004548, dated July 1, 2009, related to an update to Submittal AFB-SUB-00200R02, "Methods to Repair Elements that Exceed Specified Tolerance." Regarding the request for a CCO, AWS D1.5: 2002 requires the Engineer's approval when a revised design is requested to compensate for weld fit-up deficiencies, thus no CCO is warranted.

For a fillet weld, Section 3.3.1 of AWS D1.5: 2002 specifies, "The root opening shall not exceed 5mm..." and Section 3.7.4 specifies that, "Prior approval of the Engineer shall be obtained... for revised design to compensate for deficiencies." The use of a complete joint penetration (CJP) weld in lieu of a fillet weld location referenced in the submittal above, or any other location where it might be used, is a revised design requiring the Engineer's approval prior to performing the repair. The Engineer will want to verify details such as location, bevels, backing, and root opening prior to the repair.

The repair procedure referenced in AFB-SUB-00200R02 was to be a proactive method of allowing ZPMC to move forward when the weld fit-up for the deck diaphragm to floor beam top flange plate fillet welds (see Section A-A on contract plan sheet 649/1204) exceeded the contract tolerance of 5mm. Regarding the length of the CJP to be used in lieu of a fillet, the following shall apply:

- 1) At locations where root gap is out-of-tolerance, the fillet weld shall be replaced with a CJP weld.
- 2) The CJP weld shall extend at least 50mm beyond either sides of the out-of-tolerance root gap.
- 3) The CJP weld preparation shall have a 1:1 slope or smoother transition at the ends.4) The CJP weld shall have reinforcing fillets equal to the replaced fillet weld.
- 5) The CJP weld (including transitions) shall be 100% UT inspected.

5) The cor word (morading transitions) shall be 10076 OT inspected.

Should you like to discuss this further, please contact Doug Coe at 137-6132-2704, or (510) 714-7079.

Sincerely,

GARY PURSELL Resident Engineer

cc: Peter Siegenthaler, Doug Coe, Rick Morrow, Marwan Nader

file: 05.03.01, 57.0063